The Study of Inflation

The knowledge that I had towards inflation was very limited until I have learned about the rule of 72, and how TIPS bonds came out to be. In this report I would be examining the rule of 72, and forecasting future economic trends.

Rule of 72

According to Investopedia, it states The Rule of 72 is a quick, useful formula that is popularly used to estimate the number of years required to double the invested money at a given annual rate of return. Alternatively, it can compute the annual rate of compounded return from an investment, given how many years it will take to double the investment. The same article also explains the following, The Rule of 72 can be applied to anything that increases exponentially, such as GDP or inflation; it can also indicate the long-term effect of annual fees on an investment's growth.

Based off this information I have applied the rule of 72 to today's GDP, inflation, and employment rate and I have calculated it below.

GDP

According BEA, it states the following information **Current-dollar GDP** increased 4.8 percent at an annual rate, or \$327.5 billion, in the first quarter to a level of \$28.28 trillion. In the fourth quarter, GDP increased 5.1 percent, or \$346.9 billion (tables 1 and 3).

So utilizing the rule of 72, would look like

72/5.1 = 14.11 or 14 years which would be 2038, from today

Inflation

According to the Bureau of Labor Statistics, it states that Inflation was at the following rates for this year in 2024 so far.

January- 0.3

February- 0.4

March- 0.4

So putting the rule of 72 to use would look like,

72/0.3= 240 years from January 2024 which would be January 2264

72/0.4= 180 years from February 2024 which would be February 2264

72/0.4=180 years from March 2024 which would be March 2264

Employment

According to BLS website, it states The **Employment Cost Index (ECI)** measures the change in the hourly labor cost to employers over time. The ECI uses a fixed "basket" of labor to produce a pure cost change, free from the effects of workers moving between occupations and industries and includes both the cost of wages and salaries and the cost of benefits.

I have found information for 2023, which is listed below 2023 Quarter 1- 1.2

2023 Quarter 2- 1.0

2023 Quarter 3- 1.1

2023 Quarter 4- 0.9

Applying the Rule of 72 would look like

72/1.2 = 60 years

72/1.0=72 years

72/1.1 = 65.45 years

72/0.9 = 80 years

TIPS Bonds

According to Investopedia it states Treasury Inflation-Protected Securities (TIPS) are a type of Treasury security issued by the U.S. government. TIPS are indexed to <u>inflation</u> to protect <u>investors</u> from a decline in the purchasing power of their money.

The difference between standard Treasury bond yields and TIPS bond yield could be a very good indicator of the level of inflation. According to Treasury direct it states the rate for a treasury bond is currently at, 4.500% for 20 years, while the rate for a TIPS bond for 20 years is at 2.36% according to Y-charts.

Applying the most recent formula that I have learned about is listed below

4.500%-2.36%= 2.14%

I have to learn more about the most recent formula that I have read about today, since this is my first time reading about it.